SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

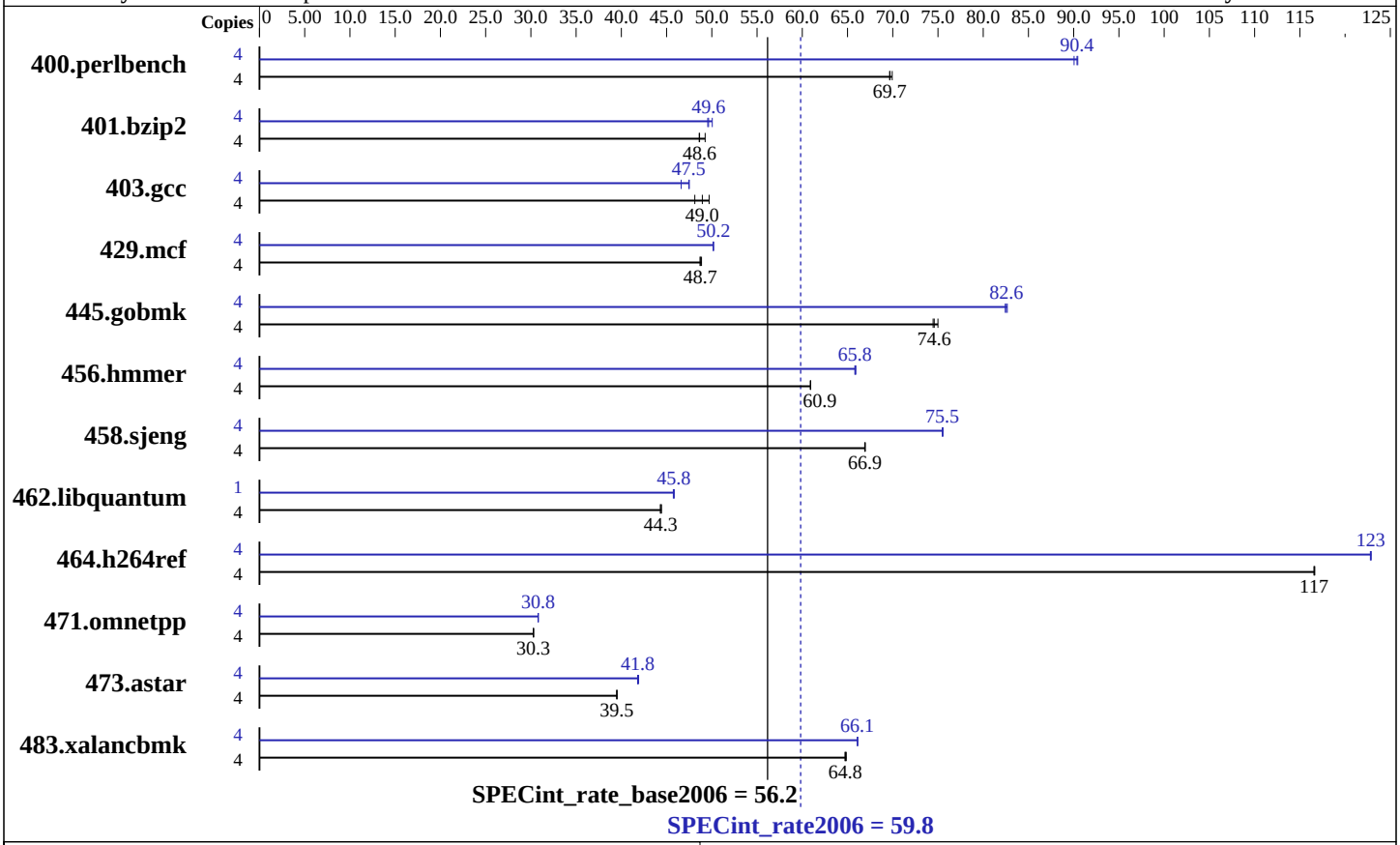
Intel D975XBX2 motherboard (Intel Core 2 Quad QX6800)

SPECint®_rate2006 = 59.8

SPECint_rate_base2006 = 56.2

CPU2006 license: 13
Test sponsor: Intel Corporation
Tested by: Intel Corporation

Test date: Nov-2007
Hardware Availability: Sep-2007
Software Availability: Nov-2007



Hardware

CPU Name:	Intel Core 2 Quad QX6800
CPU Characteristics:	2.93 GHz 1066 MHz FSB
CPU MHz:	2933
FPU:	Integrated
CPU(s) enabled:	4 cores, 1 chip, 4 cores/chip
CPU(s) orderable:	1 chip
Primary Cache:	32 KB I + 32 KB D on chip per core
Secondary Cache:	8 MB I+D on chip per chip, 4 MB shared / 2 cores
L3 Cache:	None
Other Cache:	None
Memory:	4 GB (4x1GB Micron MT16HTF12864AY-80ED4 DDR2-800 CL5)
Disk Subsystem:	Seagate 320GB NCQ SATA, 16MB cache, 7200 RPM
Other Hardware:	None

Software

Operating System:	Windows Vista64 Ultimate
Compiler:	Intel C++ Compiler for IA32 version 10.1 Build 20070913 Package ID: w_cc_p_10.1.011 Microsoft Visual Studio 2005 SP1 (for libraries)
Auto Parallel:	Yes
File System:	NTFS
System State:	Default
Base Pointers:	32-bit
Peak Pointers:	32-bit
Other Software:	SmartHeap Library Version 8.1 from http://www.microquill.com/

SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Intel Corporation

Intel D975XBX2 motherboard (Intel Core 2 Quad QX6800)

SPECint_rate2006 = 59.8

SPECint_rate_base2006 = 56.2

CPU2006 license: 13
Test sponsor: Intel Corporation
Tested by: Intel Corporation

Test date: Nov-2007
Hardware Availability: Sep-2007
Software Availability: Nov-2007

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	4	559	69.9	561	69.7	**561**	**69.7**	4	**432**	**90.4**	434	90.0	432	90.5
401.bzip2	4	784	49.3	**793**	**48.6**	794	48.6	4	**778**	**49.6**	779	49.5	771	50.0
403.gcc	4	648	49.7	**658**	**49.0**	669	48.1	4	691	46.6	678	47.5	**679**	**47.5**
429.mcf	4	749	48.7	**749**	**48.7**	747	48.9	4	**727**	**50.2**	728	50.1	727	50.2
445.gobmk	4	**563**	**74.6**	560	75.0	564	74.5	4	509	82.4	**508**	**82.6**	508	82.7
456.hmmer	4	613	60.9	613	60.9	**613**	**60.9**	4	567	65.8	**567**	**65.8**	566	65.9
458.sjeng	4	723	66.9	723	67.0	**723**	**66.9**	4	641	75.6	641	75.5	**641**	**75.5**
462.libquantum	4	**1870**	**44.3**	1865	44.4	1870	44.3	1	453	45.7	**452**	**45.8**	452	45.8
464.h264ref	4	759	117	759	117	**759**	**117**	4	721	123	**721**	**123**	720	123
471.omnetpp	4	825	30.3	**825**	**30.3**	825	30.3	4	811	30.8	**811**	**30.8**	812	30.8
473.astar	4	711	39.5	**711**	**39.5**	711	39.5	4	**672**	**41.8**	672	41.8	670	41.9
483.xalancbmk	4	426	64.7	**426**	**64.8**	426	64.9	4	418	66.1	**418**	**66.1**	417	66.1

Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

General Notes

```
Tested systems can be used with Shin-G ATX case, Antec NeoPower 480W power supply
Product description located as of 11/2007:
http://www.intel.com/products/motherboard/D975XBX2/index.htm
The system bus runs at 1066 MHz
System was configured with Asus EN8800GTX discrete graphics card
Binaries were built on Windows Vista32
The following VS 2005 SP1 updates were applied: KB926601 and KB932232
The start command with the /affinity switch was used to bind processes to cores
OMP_NUM_THREADS was set to number of logical processors as seen by the OS
KMP_AFFINITY was set to physical,0
submit was disabled for 462.libquantum at peak.
```

Base Compiler Invocation

C benchmarks:

```
icl -Qvc8 -Qc99
```

C++ benchmarks:

```
icl -Qvc8
```

Base Portability Flags

403.gcc: `-DSPEC_CPU_WIN32`

Continued on next page

Base Portability Flags (Continued)

464.h264ref: `-DSPEC_CPU_NO_INTTYPES -DWIN32`
483.xalancbmk: `-Qoption,cpp,--no_wchar_t_keyword`

Base Optimization Flags

C benchmarks:
`-fast -Qvec-guard-write /F512000000`

C++ benchmarks:
`-fast -Qcxx_features /F512000000 shlw32m.lib -link /FORCE:MULTIPLE`

Base Other Flags

C benchmarks:

403.gcc: `-Dalloca=_alloca`

Peak Compiler Invocation

C benchmarks:
`icl -Qvc8 -Qc99`

C++ benchmarks:
`icl -Qvc8`

Peak Portability Flags

403.gcc: `-DSPEC_CPU_WIN32`
464.h264ref: `-DSPEC_CPU_NO_INTTYPES -DWIN32`
483.xalancbmk: `-Qoption,cpp,--no_wchar_t_keyword`

Peak Optimization Flags

C benchmarks:

400.perlbench: `-Qprof_gen`(pass 1) `-Qprof_use`(pass 2) `-fast -Qansi-alias -Qprefetch /F512000000 shlw32m.lib -link /FORCE:MULTIPLE`

Continued on next page

Peak Optimization Flags (Continued)

401.bzip2: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qprefetch /F512000000

403.gcc: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast /F512000000

429.mcf: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qprefetch /F512000000 shlw32m.lib -link /FORCE:MULTIPLE

445.gobmk: -Qprof_gen(pass 1) -Qprof_use(pass 2) -QxT -O2 -Qipo -Qprec-div- -Qansi-alias /F512000000

456.hmmer: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qunroll2 -Qansi-alias -Qopt-multi-version-aggressive /F512000000

458.sjeng: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qunroll4 /F512000000

462.libquantum: -fast -Qunroll4 -Ob0 -Qprefetch -Qopt-streaming-stores:always -Qparallel -Qpar-runtime-control /F512000000

464.h264ref: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qunroll2 -Qansi-alias /F512000000

C++ benchmarks:

471.omnetpp: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qansi-alias -Qopt-ra-region-strategy=block -Qcxx_features /F512000000 shlw32m.lib -link /FORCE:MULTIPLE

473.astar: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qansi-alias -Qopt-ra-region-strategy=routine -Qcxx_features /F512000000 shlw32m.lib -link /FORCE:MULTIPLE

483.xalancbmk: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qansi-alias -Qcxx_features /F512000000 shlw32m.lib -link /FORCE:MULTIPLE

Peak Other Flags

C benchmarks:

403.gcc: -Dalloca=_alloca

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic10-ia32-intel64-linux-flags.20090714.09.html

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/Intel-ic10-ia32-intel64-linux-flags.20090714.09.xml`

SPEC and SPECint are registered trademarks of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.

For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

Tested with SPEC CPU2006 v1.0.
Report generated on Tue Jul 22 14:28:56 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 27 November 2007.